BUBT | BANGLADESH UNIVERSITY OF BUSINESS AND TECHNOLOGY

ASSIGNMENT

ASSIGNMENT NO -02

Course NO	:	CSE 122
Course Name	:	Object Oriented Programming LAB

Submission Date	:	10-04-2023

Submitted To

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<u>**Marks – 10**</u>

CO	Question

CO2 Imagine a publishing company that markets both book and audiocassette versions of its works. Create a class publication that stores the title (a string) and price (type float) of a publication. From this class derive two classes: book, which adds a page count (type int), and tape, which adds a playing time in minutes (type float). Each of these three classes should have a getData() function to get its data from the user at the keyboard, and a putData() function to display its data.

Write a main program to test the book and tape classes by creating instances of them, asking the user to fill in data with getData(), and then displaying the data with putData().

CO2 ANS:

```cpp
#include<iostream>
#include<string>
using namespace std;
class publication
{
    protected:
    string title;
    float price;
    public:
      publication() {
        title=" ";
        price=0.0;
        }
        publication(string t,float p)
        {
         title=t;
         price=p;
        }
    public:
void getdata() {
 cout<<"Enter title of publication: ";
 cin>>title;
 cout<<"Enter price of publication: ";
 cin>>price;
  }
 void putdata(void) {
    cout<<"Publication titles :"<<title<<endl;
    cout<<"Publication price :"<<price<<endl;
 }
};
    class book : public publication
    {
        int pagecount;
        public:
        book()
        {
            pagecount=0;

        }
        book(string t,float p,int pc):publication(t,p)
        {
            pagecount=pc;

        }
        void getdata(void) {
        publication::getdata();
        cout <<"Enter Book Page Count :";
        cin>> pagecount;
}
```

```cpp
        void putdata(void) {
        publication::putdata();
        cout<< "Book page count:"<<pagecount <<endl;
        }
    };
    class CD: public publication
    {
        float time1;
        public:
        CD()
        {
            time1=0.0;
        }
        CD(string t, float p, float tim):publication(t,p)
        {
            time1=tim;
        }
        void getdata(void)
        {
        publication::getdata();
        cout <<"Enter tape's playing time:";
        cin>> time1;
        }
        void putdata(void)
        {
         publication::putdata();
         cout<<" Tape's playing time :"<< time1<<endl;
        }
    };
int main(){
    cout<<endl<<"Book data"<<endl;
    book b("C++",230,300);
    b.putdata();
    cout<<endl<<"CD Data"<<endl;
    CD c("C++",100,120.5);
    c.putdata();
    cout<<"\n Enter New Details Of Book :\n";
    b.getdata();
    c.getdata();
    cout<<"\n\n Book data entered by user:\n";
    b.putdata();
    c.putdata();
    return 0;
}
```